

IN THE SPECIFICATION

Please replace the paragraphs at page 2, lines 6-20 with the following paragraphs:

In addition to having health concerns regarding levels of caloric and fat content, many consumers desire increased ease of use of and improved storage of butter or butter-flavored toppings. For instance, normal use of conventional spreadable butter or butter-flavored toppings requires the user to remove a serving from a container. Such removal typically requires contact between the ~~remain~~ remaining butter or butter-flavored topping and often results in contamination of the remaining butter or butter-flavored topping. A butter-flavored topping which is packaged so as to prevent such contamination is an improvement over conventional butter and butter-flavored toppings.

Furthermore, use of ~~convention~~ conventional butter or butter-flavored toppings requires opening the container, using a utensil to remove a serving, spreading the serving, closing the container and cleaning or disposing of the utensil. Such a process is aggravated if the topping is too hard or too soft and is difficult to remove or spread. A butter-flavored topping which can be delivered more easily is an improvement over conventional butter and butter-flavored toppings.

Please replace the paragraph at page 3, lines 2-3 with the following paragraph:

It is an object of the invention to provide a butter-flavored topping composition having a fat content of less than ~~15%~~ about 16 %.

Please replace the paragraphs at page 3, lines 20-23 with the following paragraphs:

Yet another object of the invention is to provide butter flavoring providing flavor strength at least twice that of conventional butter. ~~—times by weight stronger than that of conventional butter.~~

How these and other objects are accomplished will ~~become~~ be apparent from the following descriptions.

Please replace the paragraph at page 5, lines 3-13 with the following paragraph:

The preferred water-based topping composition may further comprise less than about 1% by weight nonionic lipophilic emulsifier (most preferably ~~Duratan~~ DURTAN™ 60 sorbitan monostearate), less than about 1% by weight nonionic hydrophilic emulsifier (most preferably polysorbate 60), less than about 1% by weight other emulsifier (most preferably monodiglyceride), less than about 1% by weight lecithin, less than about 1% by weight cellulose gel (most preferably microcrystalline cellulose), between about 1-2% by weight salt, and less than about 1% by weight coloring (most preferably annatto). Such further components are more preferably about 0.37% by weight cellulose gel, about 0.297% by weight nonionic lipophilic emulsifier, about 0.053% by weight nonionic hydrophilic emulsifier, about 0.053% by weight lecithin, about 0.095% by weight other emulsifier, about 1.71% by weight salt, and about 0.03% by weight coloring.

Please replace the paragraph at page 6, line 20 through page 7, line 5 with the following paragraph:

The invention further includes a method of preparing a water-based low-calorie low-fat butter-flavored topping composition. Such method comprises forming a first mixture by blending less than about 1 part cellulose gel (preferably microcrystalline cellulose) with ~~about~~ — water to form a hydrated gel, mixing in about 1-5 parts milk powder, mixing in about 1-5 parts protein (preferably cheese whey or hydrogenated soy powder), mixing in ~~about~~ — ~~additional~~ the balance of the water, mixing in about 10-16 parts bulking agent (preferably starch hydrolyzates), and heating the first mixture to over 100°F (preferably to about 130°F); forming a second mixture by melting about 13-16 parts fat (preferably coconut fat), and mixing in less than about 1 part nonionic lipophilic emulsifier (preferably ~~Duratan~~ DURTANTM 60), less than about 1 part nonionic hydrophilic emulsifier (preferably polysorbate 60), less than about 1 part lecithin and less than about 1 part other emulsifier (preferably monodiglyceride) into the fat; mixing the first mixture and the second mixture to form the composition; adding less than about 2 parts salt and less than about 1 part flavoring to the composition; pasteurizing the composition; cooling the composition to less than 50°F (preferably to about 40°F or to about 35°F); and packaging the composition. The method preferably further includes adding coloring (preferably annatto) to the composition before pasteurizing.

Please replace the four paragraphs at page 10, lines 1-22 with the following paragraphs:

A wide variety of emulsifiers may be employed in amounts from about 0.02% to ~~about~~ 0.1% less than about 4%. The emulsifiers induce the formation of a stable emulsion and improve the rate and total aeration obtained. Among the preferred emulsifiers are: lecithin; monodiglycerides of fatty acids; polysorbate, and ~~Duratan~~ DURTANTM 60. It has been found to be desirable to provide a controlled hydrophilic-lipophilic balance (HLB) as with a lipophilic emulsifier such as ~~Duratan~~ DURTANTM 60 sorbitan monostearate and/or lecithin with a hydrophilic material such as polysorbate 60.

Polysorbate 60 is a nonionic, highly hydrophilic emulsifier which is used for increased volume and stiffness in whipped toppings with overrun. Polysorbate is also referred to as polyethylene sorbitan monostearate. In addition to volume and stiffness concerns, polysorbate affects emulsion stability, viscosity, plasticity and freeze-thaw stability. The preferred polysorbate is ~~Durfax~~ DURFAX 60TM. (originally registered as a trademark by SCM Corp., of Cleveland, Ohio).

~~Duratan~~ DURTANTM 60 is a nonionic, oil dispensable, highly lipophilic emulsifier which is often used with other emulsifiers to enhance gloss retention and is used in a variety of vegetable and dairy products.

Other emulsifiers used in the water-based topping composition include food grade mono and diglycerides from vegetable oil, with citric acid to protect flavor. The preferred emulsifier is ~~Durem~~ DUREM 117TM which is often used in margarines, whipped topping and other vegetable dairy systems. ~~Durem~~ DUREM 117TM, originally registered as a trademark of SCM Corp., is a monodiglyceride made from 0-5 I.V. soybean oil (monoglyceride 40-48%, diglyceride 40-48%, triglyceride 8-12%).

Please replace the two paragraphs at page 10, line 23 through page 11, line 2 with the following paragraphs:

~~Durfax~~ DURFAX 60™ and ~~Duratan~~ DURTAN™ 60 can be used together in the water-based topping composition for a total maximum combined level of 1.04%. ~~Durfax~~ DURFAX 60™ is preferably used up to 77% of the mixture and ~~Duratan~~ DURTAN™ 60 is preferably used up to 27% of the mixture.

Lecithin is used in both in the water-based and milk-based topping composition. Lecithin is a multifunctional, flexible and versatile surfactant composed of a number of compounds, predominantly phospholipid, which exhibit their own unique physical and chemical properties under their own optimum conditions. Lecithin is utilized in a wide variety of food and industrial applications and typically comes from soy or egg yolk. It is preferred that the lecithin utilized in the topping composition is soy based. Lecithin functions as an emulsifier, release agent, fat replacer/extender and dispersing aid.

Please replace the paragraph at page 12, lines 3-13 with the following paragraph:

The preferred bulking agent is syrup solids or starch hydrolyzates, and more particularly, low D.E. (dextrose equivalent) starch hydrolyzates (those having a narrow molecular weight range of glucose polymers). The starch hydrolyzates with dextrose equivalent values below 25 are commonly referred to in the art as maltodextrins and are commercially available as ~~Maltrin~~ MALTRIN® (a registered trade mark of Grain Processing Co., of Muscatine, Iowa). For use in this invention, starch hydrolyzates having D.E. values of 10 (as found in the ~~hydrolysed~~ hydrolyzed corn starch ~~Maltrin~~ MALTRIN® 10) are preferred. The reason for this preference is that maltodextrins having higher D.E. values may impart a slight sweetness which may be objectionable in a low calorie topping, and also with the higher D.E. maltodextrins there is a greater tendency for syneresis to occur, that is, separation of the aqueous phase following initial

preparation of the topping.

Please replace the paragraph at page 12, line 30 through page 13, line 8 with the following paragraph:

The proteins in the water-based topping composition bind water, help structure and increase opacity of the composition. The preferred proteins are whey or hydrogenated soy powder. Whey is a by-product of the production of cheese. Whey may be derived from virtually any cheese source including Swiss cheese, cheddar cheese, mozzarella cheese, and the like. Proteins such as cheese whey are used for dairy flavor in the water-based topping composition. Whey proteins exhibit good foaming properties including whippability and, among the evaluated substances, have been determined to produce the most overrun in the topping composition. Denatured whey protein and ~~nature~~ natural whey protein each perform well in the water-based topping composition.

Please replace the paragraph at page 13, lines 9-15 with the following paragraph:

The milk powder of the water-based topping composition produces a good milk or dairy cream flavor in the topping composition due to ~~the~~ colloidal casein therein. In addition, the milk powder provides opacity to the composition. Titanium ~~oxide~~ dioxide could also be used to provide opacity. The milk powder is also ~~is~~ a good whipping agent and gives body to the composition and provides a stabilizing effect. ~~It is interface acting??~~ In addition, the milk powder ~~could~~ can be used in greater amounts to replace the proteins, i.e., the whey or soy powder.

Please replace the paragraph at page 13, line 25 through page 14 , line 2 with the following paragraph:

The butter ~~flavor~~ flavoring used in ~~this the~~ invention may come from a variety of ~~flavor~~ flavoring compounds. Such a butter ~~flavor~~ flavoring includes ~~flavor~~ flavoring components comprising the group of fatty acids, esters of such acids, ketones, lactones, furanones, aldehydes, organic acids, and aromatic compounds that impart butter flavor. The preferred lactone is gamma-nonalactone. The preferred ketone is diacetyl. The preferred fatty acid is butyric acid. Other preferred ~~flavors~~ flavorings are acetoin, maltol and lactic acid. The preferred butter flavor is imparted by the following composition: gamma-nonalactone (0.7%), diacetyl (2.6%), butyric acid (4.2%), acetoin (20.2%), maltol (0.8%), lactic acid (25.5%) and propylene glycol (46%).

Please replace the three paragraphs at page 14, lines 3-26 with the following paragraphs:

The preferred method of preparing the butter ~~flavor~~ flavoring includes dissolving the acetoin and maltol in the ~~propylene~~ propylene glycol (preferably with heat to melt the components), then cooling the solution to room temperature before mixing in the remaining components.

The preferred method of producing the water-based topping composition is as follows: a first portion of water (~~how much~~) at 110°F is put in a high shear Breddo liquefier and blended with ~~Avicel~~ AVICEL™ RC-591 for 7-10 minutes to activate the cellulose of the ~~Avicel~~ AVICEL™ in 4-5 micron particles in order to stabilize the fat micelles and simulate fat. Then the milk powder and cheese whey are blended in at a slower speed until completely dissolved. The balance of water (~~how much~~) is then added along with the ~~Maltrin~~ MALTRIN®10. The composition is then slowly heated to about 130°F.

At the same time ~~Ultimate~~ ULTIMATE® 92 coconut fat is melted and the emulsifiers are weighed into a portion of the fat. Then the emulsifier-added portion of the fat is blended into the

rest of the fat and poured into the heated mixture of milk solids and Avicel™. As heating is continued, salt and annatto color are added. The composition is mixed on slow speed in a tank with an agitator and heated to 170°F for 30 minutes for batch pasteurization, to 175°F for 25 seconds for HTST pasteurization, or to 280°F for 2 seconds for Ultra pasteurization. After pasteurization, the composition is cooled to 40°F or 35°F, packaged in aerosol containers and gassed with nitrous oxide. Packaging is performed by filling aerosol containers (14 ounces) with 396 grams of composition. The aerosol containers' nozzles are then crimped and 10 grams of nitrous oxide are injected into each container at 150 psi. The containers are shaken for 30 seconds to disperse the nitrous oxide. Then the containers stand for 24 hours at 30°F or 40°F.

Please replace the paragraph at page 14, line 27 through page 15, line 11 with the following paragraph:

The preferred method of producing the milk-based topping composition is as follows: the whole milk is heated to 110° F in a liquefier with high speed agitation (900 rpm) and is blended with ~~Avicel~~ AVICEL™ RC-591 for 7-10 minutes at 110° F to activate the cellulose of the ~~Avicel~~ AVICEL in 4-5 micron particles in order to stabilize the fat micelles and simulate fat. The agitation is slowed to about 450 rpm while the temperature is maintained at 110° F and the ~~Maltin~~ MALTRIN®10 is added. The composition is then slowly heated to about 130° F. When 130° F is reached, the lecithin is added. The temperature is then ramped to 170° F. While ramping, the salt and annatto are added. After the composition is held at 170° F for 30 minutes, it is transferred once through a ~~homogeniser~~ homogenizer at 1500 psi. The composition is then transferred to a kettle and cooled to 80° F. After 80° F is reached, the natural butter ~~flavor~~ flavoring is added. The composition is then packaged by filling aerosol containers (14 ounces) with 396 grams of composition. The aerosol ~~containers~~² container nozzles are then crimped and 10 grams of nitrous oxide are injected into each container at 150 psi. The containers are shaken for 30 seconds to disperse the nitrous oxide. Then the containers stand for 24 hours at 40° F.

Please replace the table at page 16, lines 4-17 with the following table:

Component	Weight % of Composition
Water	66.142
Coconut fat	14.000
Maltrin MALTRIN10	12.000
Milk powder	2.600
Whey	2.600
Salt	1.710
Avicel AVICEL RC-591	0.370
Duratan DURTAN 60	0.297
Durem DUREM117	0.095
Durfax DURFAX	0.053
Lecithin	0.053
Natural Butter Flavor Flavoring	0.050
Annatto color	0.030

Please replace the table at page 16, lines 21-30 with the following table:

Component	Weight % of Composition
Whole milk (3.2% fat)	33.000 <u>52.800</u>
Heavy cream (38% fat)	52.800 <u>33.000</u>
Maltrin 10	12.000
Salt	1.710
Avicel AVICEL RC-591	0.370
Lecithin	0.050
Natural Butter Flavor <u>Flavoring</u>	0.040
Annatto color	0.030